

WMATA Escalator Canopy Program Phase IV

National Park Service Sites

U.S. Commission of Fine Arts
February 21, 2019



Canopy Program Objectives



- Comply with current building codes.
ASME 17.1: “..a cover shall be provided directly over the escalator to protect from precipitation.”
- Improve escalators reliability.
- Protect patrons from rain, ice and snow.
- Provide design excellence that reflects dignity and elegance appropriate for an entrance to the Metro system of the Nation’s Capital.

Background



- July 2001: Signature Canopy Design by Lourie & Chenoweth LLC selected.
- Canopy Design approved by CFA and NCPC.
- State Historic Preservation Officers in each jurisdiction determined no adverse affect.
- Design presented Award of Excellence for Extraordinary Achievement in Architecture by the Washington Chapter AIA.

Canopy Prototype Design



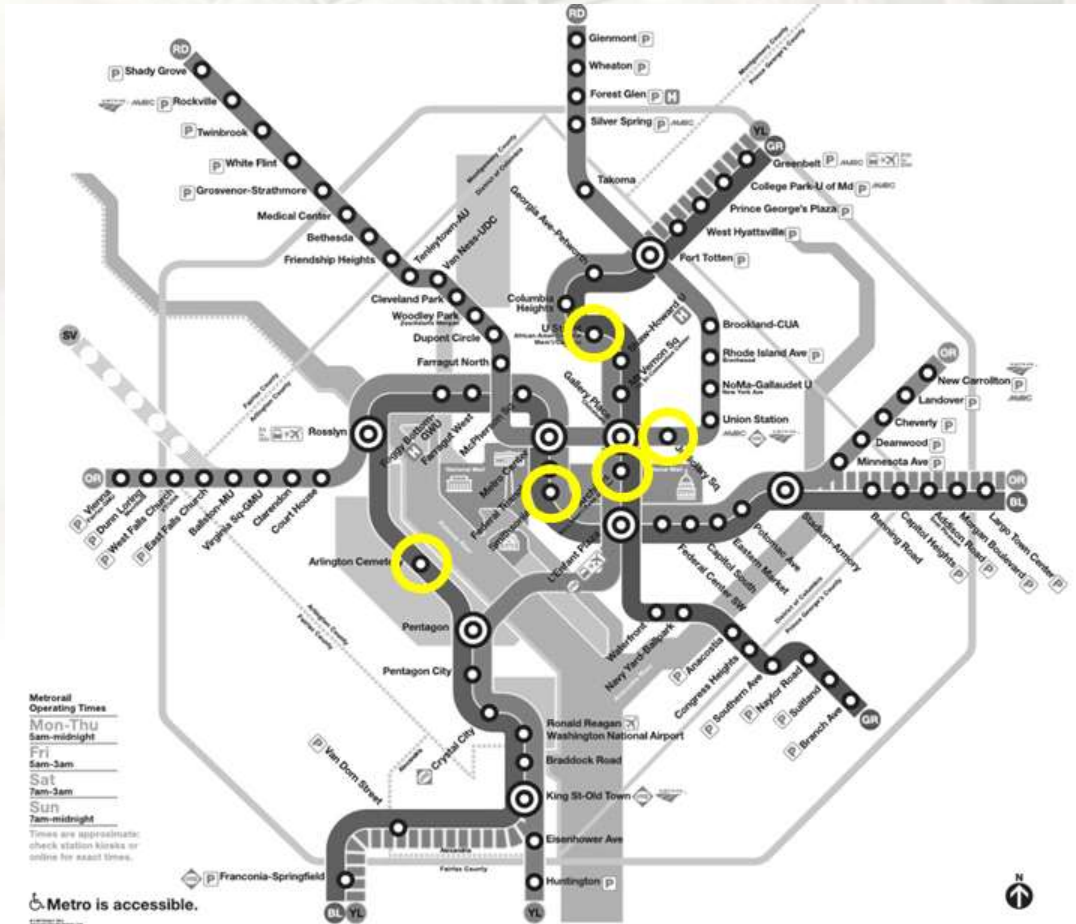
- Iconic Image: Vaulted torus form reflects original WMATA underground station ceiling vaults.
- Uniform shedding of rainwater away from wellway opening.
- Minimal Footprint: Bear on existing wellway parapet wall structure.
- Modular Design: Form adapted to cover wellways of varying sizes, ranging in width from 12 ft. to 37 ft. and length 29 ft. to 89 ft.
- Constructability:
 - Bolted Joints, Quick Assembly.
 - Limited Site Welding.
 - No interruption of WMATA service.

Canopy Program Progress Update



- Phase I: Pilot canopies installed at 4 sites (Complete)
- Phase II: Canopies installed at 25 sites (Complete)
- Phase III: Canopies installation at 10 sites (In progress)
- Phase IV: Future installation at 8 sites:
 - 3 sites scheduled for prototypical canopies
 - 5 sites on NPS property

Canopies on National Park Service Sites



1. Archives-Navy Memorial-Penn Quarter
2. Arlington Cemetery (North and South)
3. Judiciary Square (North)
4. Smithsonian (North)
5. U Street/African-Amr. Civil War Memorial (East)

Previously Discussed Canopy Options



Prototype ●



Modified Prototype ●



V-Braced ●



Blend-In ●



Tree Branching ●



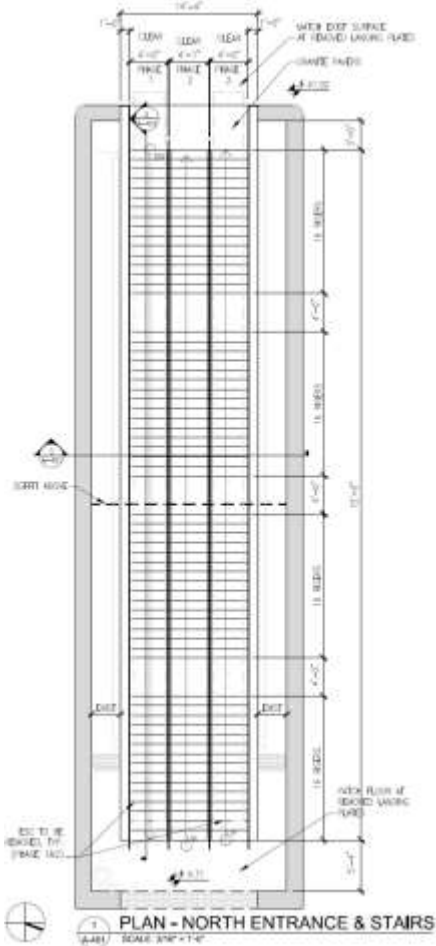
Glass Wedge ●

Legend

- Present for further review
- Not accepted

Replacement Stairs

Arlington Cemetery Stair



- Archives-Navy Memorial-Penn Quarter
26 feet rise / 46 steps
- Arlington Cemetery (North and South)
36 feet rise / 64 steps
- Judiciary Square (North)
28 feet rise / 48 steps
- Smithsonian (North)
25 feet rise / 46 steps
- U Street/African-Amr. Civil War Memorial
22 feet rise / 40 steps

Archives-Navy Memorial-Penn Quarter



Site Plan

Archives-Navy Memorial-Penn Quarter

Option 1: Prototypical Canopy



View North



View Southeast

Archives-Navy Memorial-Penn Quarter

Option 2: Partially Modified Prototypical Canopy



View North



View Southeast

Archives-Navy Memorial-Penn Quarter

Option 3: Fully Modified Prototypical Canopy



View North



View Southeast

Archives-Navy Memorial-Penn Quarter

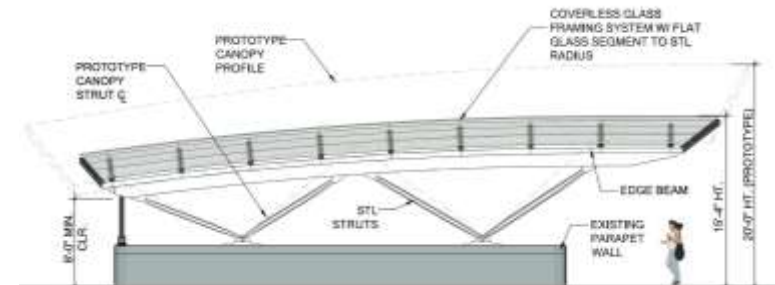
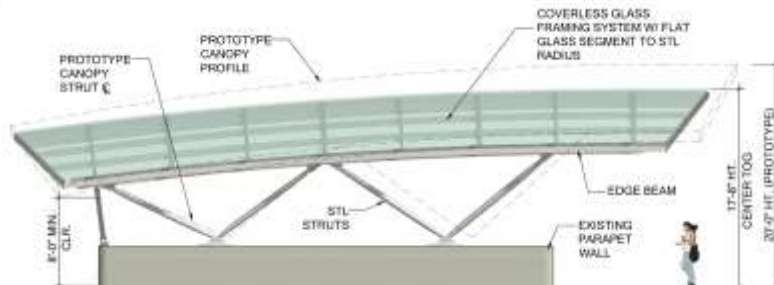
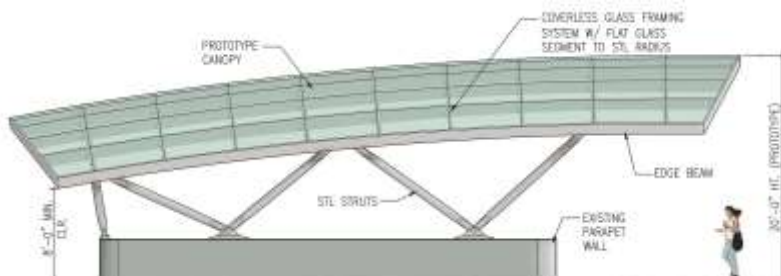
Option 1.



Option 2.



Option 3.



Arlington Cemetery (North and South)



Site Plan

Arlington Cemetery (North and South)

Canopy Site Context



View Northeast
from Arlington House

Arlington Cemetery (North and South)

Canopy Site Context



View Northeast from Women in Military Memorial



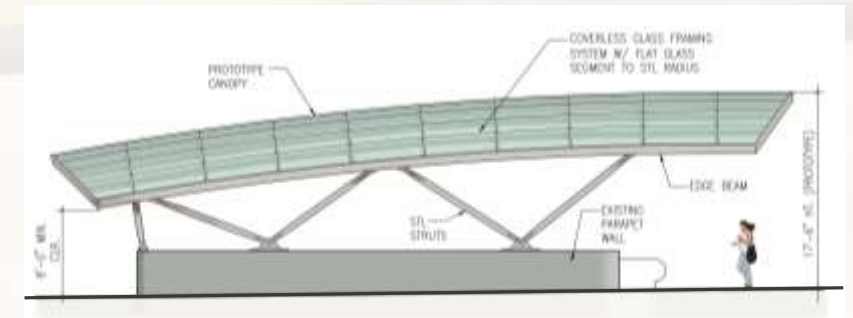
View Southwest from Memorial Circle

Arlington Cemetery (North and South)

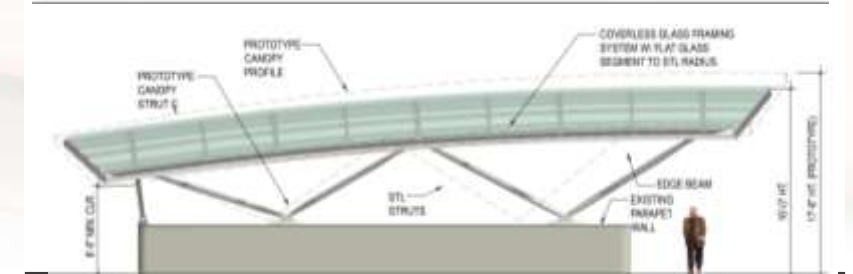
Canopy Options Summary



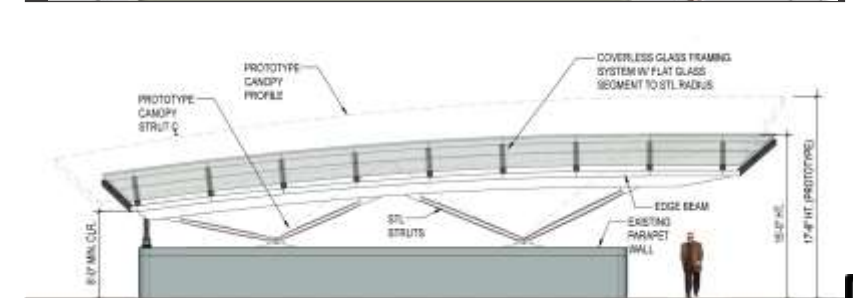
Option 1.



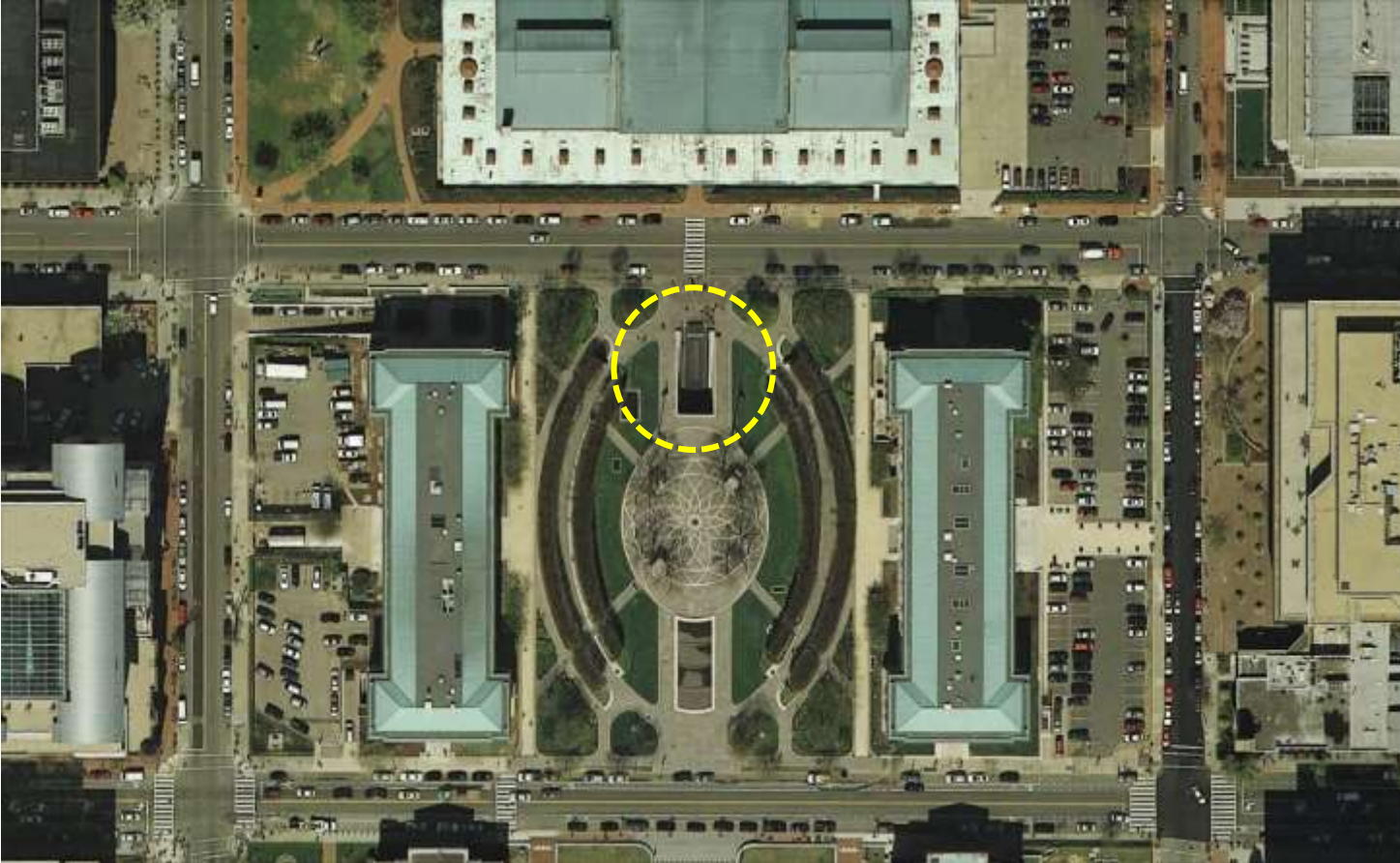
Option 2.



Option 3.



Judiciary Square North



Site Plan

Judiciary Square North

Option 1: Prototypical Canopy



View North



View South

Judiciary Square North

Option 2: Partially Modified Prototypical Canopy



View North



View South

Judiciary Square North

Option 3: Fully Modified Prototypical Canopy



View North



View South

Judiciary Square North

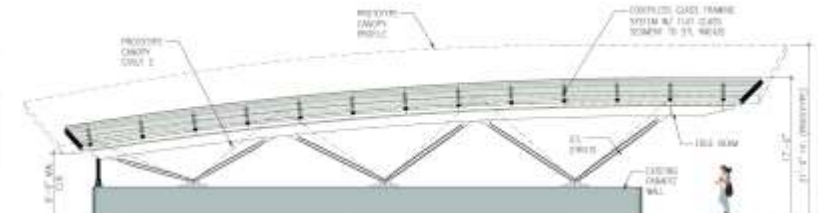
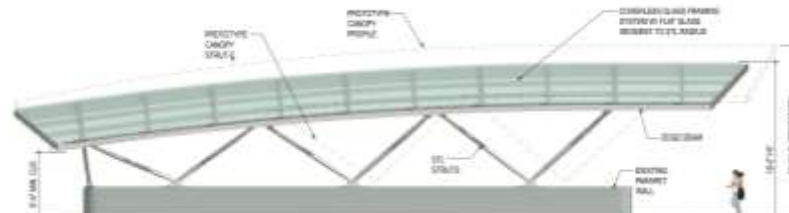
Option 1.



Option 2.



Option 3.



Judiciary Square North

Canopy Design Options Comparison



Option 1: Prototypical Canopy



Option 3: Fully Modified Prototypical Canopy

Smithsonian North



Site Plan

Smithsonian North

Option 1: Prototypical Canopy



View East



View West

Smithsonian North

Option 2: Partially Modified Prototypical Canopy



View East



View West

Smithsonian North

Option 3: Fully Modified Prototypical Canopy



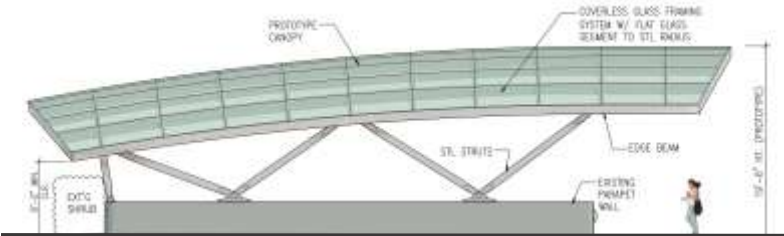
View East



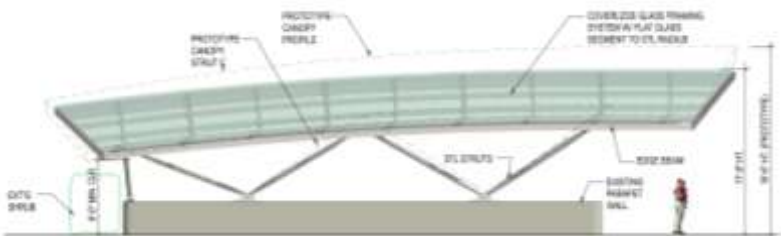
View West

Smithsonian North

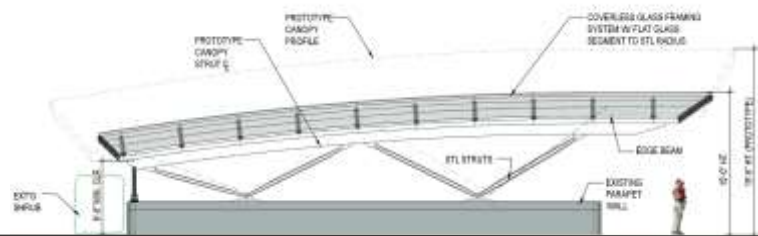
Option 1.



Option 2.



Option 3.



U Street/African-American Civil War Memorial (East)



Site Plan

U Street/African-American Civil War Memorial (East)

Option 1: Prototypical Canopy



View West



View North

U Street/African-American Civil War Memorial (East)

Option 2: Partially Modified Prototypical Canopy



View West



View North

U Street/African-American Civil War Memorial (East)

Option 3: Fully Modified Prototypical Canopy



View West



View North

U Street/African-American Civil War Memorial (East)

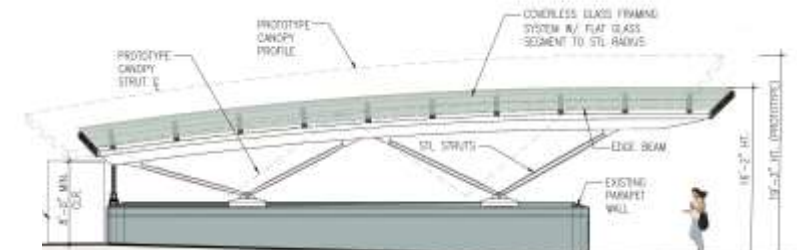
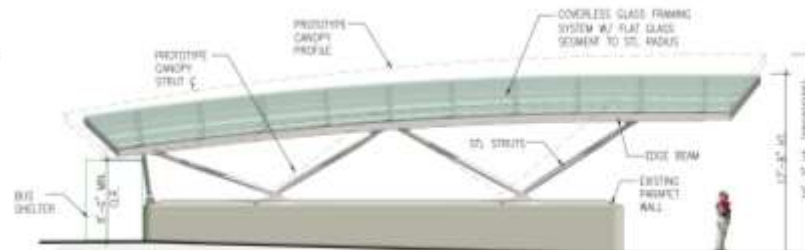
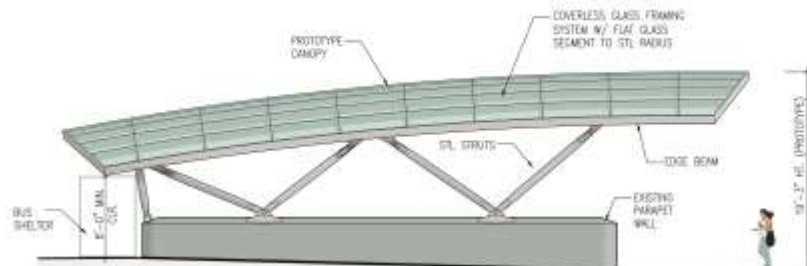
Option 1.



Option 2.



Option 3.





Thank you